IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended)   A method of scheduling a plurality of tasks ~~{t_i}~~ in a data processing system ~~(100)~~, each task having suspension data ~~(303)~~ specifying suspension of the task based on memory usage associated therewith, the method ~~including~~ comprising:

    processing one of the plurality of tasks;

    monitoring for an input indicative of memory usage of the task matching the suspension data associated with the task;

    suspending processing of said task on the basis of said monitored input; and

    processing a different one of the plurality of tasks.

2. (currently amended)   A method according to claim 1, ~~including~~ further comprising:

    receiving ~~(501)~~ first data ~~(303d)~~ identifying maximum memory usage associated with the plurality of tasks;

    receiving second data identifying memory available for processing the plurality of tasks; and

    identifying ~~(504)~~, on the basis of the first and second data, whether there is sufficient memory available to process the tasks;

in which said monitoring and suspending steps are applied (509) only in response to identifying insufficient memory.

3. (original) A method according to claim 1, in which said input comprises data indicative of a suspension request.

4. (currently amended) A method according to claim 1, in which said input comprises data indicative of memory usage of the task, and the method comprises further comprising identifying when the memory usage matches the suspension data associated with said task.

5. (currently amended) A method according to claim 1, including monitoring (601) termination of tasks and repeating (603) said step of identifying availability of memory in response to a task terminating.

6. (currently amended) A method according to claim 5, in which, in response to identifying sufficient memory to execute the remaining tasks, the monitoring step is deemed unnecessary (605).

7. (currently amended) A scheduler (401) for use in a data processing system (100), the data processing system being arranged to execute a plurality of tasks (t_i) and having access to a

specified amount of memory for use in executing the tasks, the scheduler comprising:

a data receiver ~~(203)~~ arranged to receive data identifying maximum memory usage associated with a task;

an evaluator ~~(403)~~ arranged to identify, on the basis of the received data, whether there is sufficient memory to execute the tasks;

a selector ~~(t_i, 401, 403)~~ arranged to select at least one task for suspension during execution of the task, said suspension coinciding with a specified memory usage by the task;

wherein, in response to the evaluator identifying that there is insufficient memory to execute the plurality of tasks, the selector selects one or more tasks for suspension, on the basis of their specified memory usage and the specified amount of memory available to the data processing system, and the scheduler suspends execution of the or each selected task in response to the task using the specified memory.

8. (currently amended) A scheduler according to claim 7, wherein the evaluator ~~(403)~~ is arranged to monitor termination of tasks, and in response to a task terminating, to identify whether there is sufficient memory to execute the remaining tasks.

9. (original)   A scheduler according to claim 7, wherein the data identifies an execution deadline associated with the task.

10. (currently amended)   A scheduler according to claim 9, wherein, in response to the evaluator (403) identifying sufficient memory to execute the remaining tasks, the scheduler (401) is arranged to identify a task without an execution deadline and schedule the identified task.

11. (currently amended)   A scheduler according to any one of claim 8 to claim 10, wherein, in response to the evaluator (403) identifying sufficient memory to execute the remaining tasks, the selector (t_i, 401, 403) is arranged to deselect said selected one or more tasks.

12. (currently amended)   A data processing system arranged to execute a plurality of tasks, the data processing system including comprising:

    memory (205) arranged to hold instructions and data during execution of a task (t_i);

    receiving means (203) arranged to receive data identifying maximum memory usage associated with a task;

evaluating means ~~(403)~~ arranged to identify, on the basis of the received data, whether there is sufficient memory to execute the tasks; and

a scheduler ~~(401)~~ arranged to schedule execution of the tasks on the basis of input received from the evaluating means,

wherein, in response to identification of insufficient memory to execute the plurality of tasks, the scheduler is arranged to suspend execution of at least one task in dependence on memory usage by the task.

13. (currently amended)   A data processing system according to claim 12, ~~wherein the data processing system comprises~~ <u>further comprising</u> a digital television system.

14. (currently amended)   A method of transmitting data to a data processing system, the method comprising:

transmitting data for use by the data processing system in processing a task ~~(t₁)~~; and

transmitting suspension data ~~(303)~~ specifying suspension of the task based on memory usage during processing thereof,

wherein the data processing system is arranged to perform a process comprising:

monitoring for an input indicative of memory usage of the task matching the suspension data associated with the task; and

suspending processing of said task on the basis of said monitored input.

15. (currently amended) A method according to claim 14, wherein the suspension data identifies at least one point ~~(303b)~~ at which processing of the task can be suspended, based on memory usage of the task.

16. (currently amended) A method according to claim 14, wherein the suspension data includes data ~~(303d)~~ identifying maximum memory usage associated with the task.

17. (currently amended) A method according to claim 15, wherein the task comprises a plurality of sub-jobs ~~($t_{i,j}$)~~ and said data ~~(303b)~~ identifying at least one point at which processing of the task can be suspended corresponds to each such sub-job.

18. (currently amended) A method of configuring a task ~~(t_i)~~ for use in a data processing system, the method including associating suspension data ~~(303)~~ with the task, the suspension data specifying suspension of the task based on memory usage associated therewith,

wherein the data processing system is arranged to perform a process in respect of a plurality of tasks, the process comprising:

monitoring for an input indicative of memory usage of the task matching the suspension data associated with the task; and

suspending processing of said task on the basis of said monitored input.

19. (currently amended) A method according to claim 18, ~~including~~ further comprising identifying a data processing system configured to process the task and transmitting said suspension data to the data processing system.

20. (currently amended) A computer program comprising a set of instructions arranged to cause a processing system to perform the method according to ~~any one of claim 1 to claim 6~~ claim 1.